

PRESSURE CONTROL VALVE

BACKGROUND OF THE INVENTION

[0001] The invention relates to a pressure control valve, particularly for controlling the hydraulic pressure in a motor vehicle transmission, with a valve tappet guided in a valve housing, which tappet presents at least a first valve closing element for disconnection or connecting a first pressure medium connection from or to a second pressure medium connection, with a valve seat turned toward the first valve closing element, as well as with a magnet armature actuating the valve tappet, which armature is arranged movably inside a valve coil arranged on the valve housing.

[0002] DE 197 44 696 A1 already disclosed such a pressure control valve for regulating the hydraulic pressure in a motor vehicle transmission, where the valve tappet is guided at a distance from the valve closing element in sections in the valve housing. The pressure control valve is designed as a 3/2-way valve, so that, in addition to the valve closing element arranged in the flow path between the inlet and outlet ducts, via an additional valve closing element which acts as a throttling step at the valve tappet, an additional adjustable flow path to a leakage duct is formed, which leakage duct is closed by the throttling step, as soon as the ball-shaped valve closing element is lifted by the valve tappet from the valve seat.

[0003] The problem of the invention is to modify a pressure control valve of the indicated type in such a manner that, while simultaneously improving the functioning, an appropriate reduction of the manufacturing expenditure is reached using as simple as possible building means.